

WHAT IS CLAIMED IS:

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1. A network device control apparatus comprising:  
receiving means for receiving data from a network  
by using a standard protocol;  
5 detecting means for detecting a special attribute  
value in said standard protocol with respect to said  
data; and  
setting means for setting various parameters in  
accordance with said attribute value in the case where  
10 a destination physical address of said data and its own  
physical address are the same.
2. An apparatus according to claim 1, wherein in  
the case where a destination logic address of said data  
15 and its own logic address differ and said destination  
physical address and the own physical address are the  
same, said setting means sets the various parameters in  
accordance with said attribute value.
- 20 3. An apparatus according to claim 1, wherein said  
setting means sets a destination logic address of said  
data to its own logic address.
- 25 4. An apparatus according to claim 1, wherein said  
standard protocol is an Internet protocol, and  
said physical address is an IP address.

Sub A' 7

5. An apparatus according to claim 1, wherein said physical address is an MAC address.
- 5       6. An apparatus according to claim 4, wherein said data is an ICMP echo message by an ICMP protocol.
- 10      7. An apparatus according to claim 1, wherein said attribute value is a data length of said data.
- 15      8. An apparatus according to claim 1, wherein said attribute value is a TTL value of said data.
- 15      9. A network device control apparatus comprising:  
                receiving means for receiving an ICMP echo  
                message;  
                data length detecting means for detecting a data  
                length of said ICMP echo message; and  
                setting means for setting various setting  
                parameters in accordance with a value of said data  
20      length in the case where a destination MAC address and  
                its own MAC address are the same.
- 25      10. An apparatus according to claim 9, wherein in  
                the case where a destination IP address of said ICMP  
                echo message and its own IP address differ and said  
                destination MAC address and said own MAC address are  
                the same, said setting means sets the various setting

Sub A7

parameters in accordance with the value of said data length.

11. An apparatus according to claim 9, wherein said  
5 setting means sets a destination IP address of said  
ICMP echo message to its own IP address.

12. A network device control method comprising:  
a receiving step of receiving data from a network  
10 by using a standard protocol;  
a detecting step of detecting a special attribute  
value in said standard protocol with respect to said  
data; and  
a setting step of setting various parameters in  
15 accordance with said attribute value in the case where  
a destination physical address of said data and its own  
physical address are the same.

13. A method according to claim 12, wherein in said  
20 setting step, in the case where a destination logic  
address of said data and its own logic address differ  
and said destination physical address and the own  
physical address are the same, the various parameters  
are set in accordance with said attribute value.

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14. A method according to claim 12, wherein in said  
setting step, a destination logic address of said data

Sub A'7

is set to its own logic address.

15. A method according to claim 12, wherein said standard protocol is an Internet protocol, and  
5 said physical address is an IP address.

16. A method according to claim 12, wherein said physical address is an MAC address.

10 17. A method according to claim 15, wherein said data is an ICMP echo message by an ICMP protocol.

18. A method according to claim 12, wherein said attribute value is a data length of said data.

15 19. A method according to claim 12, wherein said attribute value is a TTL value of said data.

20 20. A network device control method comprising:  
a receiving step of receiving an ICMP echo message;  
a data length detecting step of detecting a data length of said ICMP echo message; and  
a setting step of setting various setting parameters in accordance with a value of said data length in the case where a destination MAC address and  
25 its own MAC address are the same.

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21. A method according to claim 20, wherein in said setting step, in the case where a destination IP address of said ICMP echo message and its own IP address differ and said destination MAC address and 5 said own MAC address are the same, the various setting parameters are set in accordance with the value of said data length.

22. A method according to claim 20, wherein in said 10 setting step, a destination IP address of said ICMP echo message is set to its own IP address.

23. A computer-readable recording medium which stores a network device control program, wherein said 15 network device control program comprises:  
a receiving step of receiving data from a network by using a standard protocol;  
a detecting step of detecting a special attribute value in said standard protocol with respect to said 20 data; and  
a setting step of setting various parameters in accordance with said attribute value in the case where a destination physical address of said data and its own physical address are the same.

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24. A medium according to claim 23, wherein in said setting step, in the case where a destination logic

address of said data and its own logic address differ and said destination physical address and the own physical address are the same, the various parameters are set in accordance with said attribute value.

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25. A medium according to claim 23, wherein in said setting step, a destination logic address of said data is set to its own logic address.

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26. A medium according to claim 23, wherein said standard protocol is an Internet protocol, and said physical address is an IP address.

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27. A medium according to claim 23, wherein said physical address is an MAC address.

28. A medium according to claim 26, wherein said data is an ICMP echo message by an ICMP protocol.

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29. A medium according to claim 23, wherein said attribute value is a data length of said data.

30. A medium according to claim 23, wherein said attribute value is a TTL value of said data.

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31. A computer-readable recording medium which stores a network device control program, wherein said

*Sub A<sup>2</sup>7*

network device control program comprises:

a receiving step of receiving an ICMP echo message;

5 a data length detecting step of detecting a data length of said ICMP echo message; and

a setting step of setting various setting parameters in accordance with a value of said data length in the case where a destination MAC address and its own MAC address are the same.

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32. A medium according to claim 31, wherein in said setting step, in the case where a destination IP address of said ICMP echo message and its own IP address differ and said destination MAC address and 15 said own MAC address are the same, the various setting parameters are set in accordance with the value of said data length.

20 33. A medium according to claim 31, wherein in said setting step, a destination IP address of said ICMP echo message is set to its own IP address.

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34. A network device control program comprising:

25 a receiving step of receiving data from a network by using a standard protocol;

a detecting step of detecting a special attribute value in said standard protocol with respect to said

*Sub A3*

data; and

a setting step of setting various parameters in accordance with said attribute value in the case where a destination physical address of said data and its own physical address are the same.

35. A program according to claim 34, wherein in said setting step, in the case where a destination logic address of said data and its own logic address differ and said destination physical address and the own physical address are the same, the various parameters are set in accordance with said attribute value.

36. A program according to claim 34, wherein in said setting step, a destination logic address of said data is set to its own logic address.

37. A program according to claim 34, wherein said standard protocol is an Internet protocol, and said physical address is an IP address.

38. A program according to claim 34, wherein said physical address is an MAC address.

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39. A program according to claim 37, wherein said data is an ICMP echo message by an ICMP protocol.

40. A program according to claim 34, wherein said attribute value is a data length of said data.

5 41. A program according to claim 34, wherein said attribute value is a TTL value of said data.

*Sub A47* 42. A network device control program comprising:

10 a receiving step of receiving an ICMP echo message;

10 a data length detecting step of detecting a data length of said ICMP echo message; and

15 a setting step of setting various setting parameters in accordance with a value of said data length in the case where a destination MAC address and its own MAC address are the same.

20 43. A program according to claim 42, wherein in said setting step, in the case where a destination IP address of said ICMP message and its own IP address differ and said destination MAC address and said own MAC address are the same, the various setting parameters are set in accordance with the value of said data length.

25 44. A program according to claim 42, wherein in said setting step, a destination IP address of said ICMP echo message is set to its own IP address.